

## Life Sciences

1. Which of the following is a large blood vessel that carries blood away from the heart?

- a) Vein
- b) Artery
- c) Capillary
- d) Nerve

Answer: Option (b)

Explanation:

The pulmonary artery carries blood from the right side of the heart to the lungs to pick up a fresh supply of oxygen.

2. Which of the following is not a member of the vitamin B complex?

- a) Thiamine
- b) Riboflavin
- c) Folic acid
- d) Ascorbic acid

Answer: Option (d)

Explanation:

Vitamin b complex consists of 8 vitamins namely B1, B2, B3, B5, B6, B7, B 9 and B12. Vitamin B1 is Thiamine, Vit B2 is Riboflavin, Vit B3 is Niacin, Vit B5 is pantothenic acid, Vit B6 is pyridoxine, biotin, folic acid and Vit B12 is cyanocobalamin.

3. Fungi are plants that lack:

- a) Oxygen
- b) Carbon dioxide
- c) Chlorophyll
- d) None of these

Answer: Option (c)

Explanation:

We know plants prepare their own food and so are known as autotrophs. With the help of photosynthesis they make food in which they produce glucose from carbon dioxide and sunlight. Also, oxygen is released by plants which is further used by humans and other animals. But Fungi lack chlorophyll and do not engage in photosynthesis.

4. What makes a reptile a reptile?

- a) Cold blooded
- b) Warm Blooded
- c) Non-Hearing
- d) Egg-laying

Answer: Option (d)

Explanation:

Reptiles skin is covered with hard, dry scales and most reptiles lay eggs. Those animals which are cold-blooded don't automatically maintain a constant body temperature. They have to lay out in the sun to keep their body heat up.

5. Which blood vessels have the smallest diameter?

- a) Capillaries
- b) Arterioles
- c) Venules
- d) Lymphatic

Answer: Option (a)

Explanation:

Blood is carried through the body by Blood Vessels. With the help of perfusion process capillaries supply blood to the tissues. The diameter of capillary ranges from 5-10 micrometers. The diameter of arteriole is approx. 30 micrometer.

6. Which of the following is an air-borne disease?

- a) Measles
- b) Typhoid
- c) Pink eye
- d) None of the above

Answer: Option (a)

Explanation:

Airborne diseases are the infections spread by airborne transmissions including Chickenpox, Anthrax, Influenza, Measles, Smallpox, Cryptococcosis and Tuberculosis.

7. Which organ of the body produces the fluid known as bile?

- a) Liver
- b) Pancreas
- c) Gall bladder
- d) Kidney

Answer: Option (a)

Explanation:

Liver produces a digestive fluid known as bile. Liver releases Bile into Gall Bladder, a small, pear-shaped organ located just below your liver in the upper right side of your abdomen.

8. Which of the following hormones is a steroid?

- a) Estrogen
- b) Glucagon
- c) Insulin
- d) Oxytocin

Answer: Option (a)

Explanation:

Steroid hormone is produced by three endocrine organs. The testes, produces testosterone; the ovaries, produces estrogen; and the adrenal cortex, produces steroid hormones such as cortisol and aldosterone. Steroid hormones are derived from cholesterol and are lipid-soluble molecules.

9. Which one of the following is not a function of the liver?

- a) Regulation of blood sugar
- b) Enzyme activation
- c) Detoxiation
- d) Reproduction

Answer: Option (d)

Explanation:

Liver is the body's largest internal organ. It has many functions in the body like it helps in protein synthesis and blood clotting, manufacturing triglycerides and cholesterol, glycogen synthesis, and bile production. It also detoxifies chemicals and metabolizes drugs.

10. Which part of human body skin has greatest number Sweat glands?

- a) Forehead
- b) Forearm
- c) Palm of the hand
- d) Back

Answer: Option (c)

11. Who among the following had started vaccination?

- a) Jonas E. Salk
- b) Paul Muller
- c) Edward Jenner
- d) Robert Frost

Answer: Option (c)

12. Liver, milk, egg yolk, fish liver oil is the source of:

- a) Vitamin A
- b) Vitamin B2
- c) Vitamin D
- d) Vitamin C

Answer: Option (c)

13. Digestion of proteins starts in the:

- a) Mouth
- b) Stomach
- c) Duodenum
- d) Intestine

Answer: Option (b)

14. Which of the following acid that is secreted in the stomach?

- a) HCl
- b) H<sub>2</sub>SO<sub>4</sub>
- c) H<sub>2</sub>CO<sub>3</sub>
- d) HNO<sub>3</sub>

Answer: Option (a)

15. Which of the following is not a primary food product?

- a) Vegetables
- b) Milk
- c) Cereals
- d) Fruits

Answer: Option (b)

16. Which of the vegetables have abundance of Vitamins A and C?

- a) Brinjal
- b) Lady's finger
- c) Potato
- d) Tomato

Answer: Option (d)

17. Which of the following defence of the human body against bacteria?

- a) Haemoglobin
- b) Phagocytes
- c) Red blood cells
- d) Blood platelets

Answer: Option (b)

18. Which of the following nerves connected from the eyes to ears?

- a) Cerebrum
- b) Cerebellum
- c) Medulla
- d) Spinal cord

Answer: Option (b)

19. Which of the following blood vessel that carries deoxygenated blood?

- a) Aorta
- b) Pulmonary artery
- c) Hepatic artery
- d) Pulmonary vein

Answer: Option (b)

20. Which of the following growth of human body affected by somatotrophic hormone?

- a) Bones
- b) Hair
- c) Muscles
- d) Connective tissue

Answer: Option (a)

21. The behavioural pattern of which one of the following organisms may upset when DOT is used as pesticide?

- a) Earthworm
- b) Snake
- c) Fish
- d) Frog

Answer: Option (c)

22. What is another name of Vitamin K?

- a) Nicotinic acid
- b) Riboflavin
- c) Thiamine
- d) 2 Methyl-1, 4-naphthoquinone

Answer: Option (d)

23. Which of the following hormone controlled the blood pressure?

- a) Vasopressin
- b) Oxytocin
- c) Estrogens
- d) Testosterone

Answer: Option (a)

24. Brain and the spinal cord are invested by membranes called:

- a) Arachnoids
- b) Pleural membrane
- c) Meninges
- d) None of these

Answer: Option (c)

25. Which one of the following organisms has a role in converting nitrates to free nitrogen?

- a) Pseudomonas
- b) Nitrosomonas
- c) Nitrobacter
- d) Rhizobium

Answer: Option (d)

26. Which of the following is a sexually transmitted disease?

- a) Leukaemia
- b) Hepatitis
- c) Colour Blindness
- d) All of the above

Answer: Option (c)

27. Which one of the following systems of the body is primarily attacked by the HIV?

- a) Cardiovascular
- b) Immune
- c) Respiratory
- d) Reproductive

Answer: Option (b)

28. In the human body, the blood enters the aorta of the circulatory system from the:

- a) Left atrium
- b) Left ventricle
- c) Right atrium
- d) Right ventricle

Answer: Option (b)

29. Which one of the following plant nutrients is not supplemented in the soil for growing legumes?

- a) Nitrogen
- b) Potassium
- c) Phosphorus
- d) None of these

Answer: Option (b)

30. Which of the following are known as the suicide bags of cells?

- a) Ribosomes
- b) Golgi bodies
- c) Lysosomes
- d) Nucleoli

Answer: Option (c)

31. Chromosome complement in Turner's syndrome is

- a) 47; XXY
- b) 45; XO
- c) 46; XX
- d) 47; XYY

Answer: Option (b)

32. Excess of amino acids is broken down to form urea in:

- a) Kidney
- b) Liver
- c) Spleen
- d) Rectum

Answer: Option (a)

33. Who among the following discovered the anti-rabies vaccine?

- a) Edward Jenner
- b) James Lind
- c) Louis Pasteur
- d) Robert Koch

Answer: Option (a)

34. Which of the following teeth of child (3-4 Years) is not a part of the milk teeth?



- a) Incisors
- b) Canines
- c) Molars
- d) Premolars

Answer: Option (c)

35. Who said this statement? "I flatter myself having discovered the method that nature employs to purify air. It is vegetation."

- a) Antonine Laurent Lavoisier
- b) Joseph Priestley
- c) Louis Pasteur
- d) William Harvey

Answer: Option (b)

36. Why it is not advisable to sleep under a tree at night?

- a) Release of less oxygen
- b) Release of more oxygen
- c) Release of carbon dioxide
- d) Release of carbon monoxide

Answer: Option (c)

37. What is the averages rate of the heart beats (per minute) in an adult?

- a) 60
- b) 72
- c) 84
- d) 96

Answer: Option (b)

38. Which of the following is the volume of the urine produced in an adult human every 24 hours?

- a) 1 litre
- b) 1.5 litres
- c) 3.0 litres
- d) 5.0 litres

Answer: Option (b)

39. Which of the following pigment causes eye colour of person (brown eyes, blue eyes or black eyes)?

- a) Cornea
- b) Choroid
- c) Iris
- d) Vitreous body

Answer: Option (c)

40. Which of the following led to the expulsion of milk from the breast during suckling?

- a) Prolactin
- b) Oxytocin
- c) Vasopressin
- d) Estrogen and Progesterone

Answer: Option (b)

41. Which of the following blood group is considered as Universal Donor?

- a) A
- b) AB
- c) B
- d) O

Answer: Option (b)

42. What part of the Quinine plant is commonly used drug for Malaria?

- a) Leaves
- b) Fruits
- c) Root
- d) Stem bark

Answer: Option (d)

43. Which of the following disease occur when the replacement of breast feeding by less nutritive food, low in proteins and calories, infants below the age of one year?

- a) Kwashiorkor
- b) Marasmus
- c) Rickets
- d) Pellagra

Answer: Option (b)

44. In how many times human will lose their consciousness if blood will stop flowing to the brain?

- a) 2 sec
- b) 5 sec
- c) 15 to 20 sec
- d) 5 min

Answer: Option (b)

45. How many bones comprise the adult human skeleton?

- a) 204 bones
- b) 206 bones
- c) 208 bones
- d) 214 bones

Answer: Option (b)

46. Which of the following statement is related with the 'Sulphur shower'?

- a) Discharge of large quantities of Crocus (yellow kesar) pollen grains into the air.
- b) Discharge of large quantities of pinus pollen grains into the air forming yellowish clouds.
- c) Release of a large amount of sulphur particles into the air from factories processing sulphur.
- d) Release of a large amount of sulphur particles into the air near sulphur mines.

Answer: Option (b)

47. Name the Glands associated with the Human Digestive System?

- a) Salivary Glands and Pancreas
- b) Salivary Glands and Liver
- c) Liver and Pancreas
- d) Salivary Glands, Liver & Pancreas

Answer: Option (d)

48. Arrange the correct sequence of the steps involved in the process of Human Digestive System?

- a) Digestion, Ingestion, Assimilation, Egestion and Absorption
- b) Ingestion, Digestion, Absorption, Assimilation and Egestion
- c) Egestion, Absorption, Digestion, Assimilation and Ingestion
- d) Assimilation, Absorption, Ingestion, Digestion and Egestion

Answer: Option (b)

49. In which part of the body digestion of protein begins?

- a) Pancreas
- b) Stomach
- c) Small Intestine
- d) Large Intestine

Answer: Option (b)

50. Name the largest part of the Alimentary canal?

- a) Large Intestine
- b) Small Intestine
- c) Liver
- d) Stomach

Answer: Option (b)

51. Which of the following group of gases contribute to the 'Green House Effect'?

- a) Carbon tetrafluoride and Nitrous oxide
- b) Carbon monoxide and Sulphur dioxide
- c) Ammonia and Ozone
- d) Carbon dioxide and Methane

Answer: Option (d)

52. Which one of the following disease is not transmitted by tiger mosquitoes?

- a) Dengue
- b) Chikungunya
- c) Japanese Encephalitis
- d) Yellow fever

Answer: Option (c)

53. Which one of the following air pollution can affect blood stream leading to death?

- a) Cadmium
- b) Asbestos dust
- c) Carbon monoxide
- d) Lead

Answer: Option (c)

54. Plants receive their nutrients mainly from?

- a) atmosphere
- b) chlorophyll
- c) light
- d) soil

Answer: Option (d)

55. What is movement of cell against concentration gradient is called

- a) osmosis
- b) active transport
- c) diffusion
- d) passive transport

Answer: Option (b)

56. The disease caused by deficiency of protein in children is called

- a) Pellagra
- b) Marasmus
- c) Beri-Beri
- d) Rickets

Answer: Option (b)

57. Plants synthesis protein from

- a) Starch
- b) Sugar
- c) Fatty acids
- d) Amino acids

Answer: Option (d)

58. Which of the following gases readily combines with the haemoglobin of the blood?

- a) Carbon monoxide
- b) Methene
- c) Oxygen
- d) Nitrogen dioxide

Answer: Option (a)

59. Human blood is a viscous fluid due to

- a) Platelets in plasma
- b) Proteins in blood
- c) RBC and WBC in blood
- d) Sodium in serum

Answer: Option (b)

60. What would happen if human blood becomes acidic?

- a) Oxygen-carrying capacity of haemoglobin is increase
- b) Oxygen-carrying capacity of haemoglobin is decrease
- c) Will remain same
- d) Will be unpredictable

Answer: Option (b)

Explanation:

Human blood becomes acidic means low pH

61. Which of the following tests helps in diagnosis of cancer?

- a) Urine test
- b) Neuro Test
- c) Blood test
- d) Biopsy test

Answer: Option (d)

62. The compound used in anti-malarial drug is

- a) Chloroquin
- b) Aspirin
- c) Neoprene
- d) Isoprene

Answer: Option (a)

63. Which of the following is a skin disease?

- a) Rickets

- b) Osteomalacia
- c) Anaemia
- d) Pellagra

Answer: Option (d)

64. Which one of the following is an enzyme?

- a) Somatotropin
- b) Trypsin
- c) Glucagon
- d) Insulin

Answer: Option (b)

65. The deficiency of which of the following leads to dental caries?

- a) Iron
- b) Fluorine
- c) Copper
- d) Zinc

Answer: Option (b)

66. Which is responsible for the process of cell division?

- a) mitosis
- b) heterosis
- c) fusion
- d) fission

Answer: Option (a)

67. Which among the following is the most important role played by Ribosome in the cells?

- a) Synthesis of RNA
- b) Synthesis of DNA
- c) Synthesis of Proteins
- d) Metabolism of Carbohydrates

Answer: Option (c)

68. Atherosclerosis refers to ailment of

- a) Kidney

- b) Heart
- c) Lungs
- d) Liver

Answer: Option (b)

69. A muscular wall is absent in

- a) Capillary
- b) Vein
- c) Venule
- d) Arteriole

Answer: Option (a)

70. Adrenaline directly affects

- a) Oxyntic cells of stomach
- b) Sinoatrial node
- c) Islet of Langerhans
- d) Dorsal root ganglia of spinal cord

Answer: Option (b)

71. In sun our face becomes reddish due to

- a) Breakup of RBC and release of haemoglobin
- b) Expansion of blood capillaries
- c) Effect of light
- d) Irritation of skin

Answer: Option (b)

72. Anticoagulant of fresh water leech is

- a) Sodium citrate
- b) Heparin
- c) Hirudin
- d) Chelating agent

Answer: Option (c)

73. Artificial pace maker is transplanted in

- a) Inter auricular septum



- b) Below the collar bone
- c) Inter ventricular septum
- d) Right auricle

Answer: Option (b)

74. Blood pressure increases and heart rate decreases in response to

- a) Exposure to high altitude
- b) Exercise
- c) Hemorrhage
- d) Increased intracranial pressure

Answer: Option (d)

75. Coronary heart disease is due to

- a) Streptococci bacteria
- b) Inflammation of pericardium
- c) Weakening of the heart valves
- d) Insufficient blood supply to the heart muscles

Answer: Option (d)

76. Maximum amount of oxygen is exchanged from the blood in the

- a) capillaries surrounding tissue cells
- b) capillaries surrounding the alveoli
- c) left auricle of the heart
- d) arteries of the body

Answer: Option (a)

77. If one litre of water is introduced in human blood, then

- a) BMR decreases
- b) BMR increases
- c) RBC collapses and urine production increases
- d) RBC collapses and urine production decreases

Answer: Option (c)

78. Among the following stem cells, which are found in the umbilical cord?

- a) Cord blood stem cells
- b) Adult stem cells

- c) Embryonic stem cells
- d) All of the above

Answer: Option (a)

79. In a healthy adult man the normal diastolic pressure is

- a) 80 mm Hg
- b) 90 mm Hg
- c) 100 mm Hg
- d) 120 mm Hg

Answer: Option (a)

80. In which of the following disorders, blood has a defective hemoglobin?

- a) Hematoma
- b) Hematuria
- c) Hemophilia
- d) Sickle cell anemia

Answer: Option (d)

81. The difference between systolic and diastolic pressure in human is

- a) 40 mm Hg
- b) 80 mm Hg
- c) 120 mm Hg
- d) 200 mm Hg

Answer: Option (a)

82. Both erythrocytes and leucocytes are formed in

- a) Lymph nodes
- b) Bone marrow
- c) Thymus
- d) Arterial walls

Answer: Option (b)

83. 'Bundle of His' is a part of which one of the following organs in humans?

- a) Pancreas
- b) Brain

- c) Heart
- d) Kidney

Answer: Option (c)

84. Christmas disease is also known as

- a) Haemophilia B
- b) AIDS
- c) Haemophilia A
- d) Haemolytic jaundice

Answer: Option (a)

85. Major part of the plasma consists of

- a) Organic substances
- b) Inorganic substances
- c) Blood cells
- d) Water

Answer: Option (d)

86. Globulins contained in human blood plasma are primarily involved in

- a) Clotting of blood
- b) Defence mechanisms of body
- c) Osmotic balance of body fluids
- d) Oxygen transport in the blood

Answer: Option (b)

87. Graveyard in RBCs is

- a) Liver
- b) Spleen
- c) Kidney
- d) Lymph glands

Answer: Option (b)

88. At the time of implantation, the human embryo is called

- a) zygote
- b) blastocyst

- c) embryo
- d) foetus

Answer: Option (b)

89. The chemical substance released by activated spermatozoa that acts on the ground substances of the follicle cells is known as

- a) Progesterone
- b) Hyaluronidase
- c) Relaxin
- d) Gonadotropin

Answer: Option (b)

90. Which one of the followings belongs to platyhelminthes?

- a) Plasmodium
- b) Trypanosoma
- c) Schistosoma
- d) Wuchereria

Answer: Option (c)

91. The scientific name of Asian tiger mosquito

- a) *Aedes aegypti*
- b) *Aedes albopictus*
- c) *Aedes taeniorhynchus*
- d) *Aedes albolineatus*

Answer: Option (b)

92. Water-Vascular' system is found in

- a) Sea-anemone
- b) Sea-pen
- c) Sea-cucumber
- d) Sea-horse

Answer: Option (c)

93. Which one of the followings in birds indicates their reptilian ancestry?

- a) Eggs with a calcareous shell

- b) Scales on their hind limbs
- c) Four-chambered heart
- d) Two special chambers crop and gizzard in their digestive tract

Answer: Option (b)

94. Measuring Biochemical Oxygen Demand (BOD) is a method used for

- a) Measuring the activity of *Saccharomyces cerevisiae* in producing curd on a commercial scale
- b) Working out the efficiency of R.B.Cs. about their capacity to carry oxygen
- c) Estimating the amount of organic matter in sewage water
- d) Working out the efficiency of oil driven automobile engines

Answer: Option (c)

95. Common indicator organism of water pollution is:

- a) *Entamoeba histolytica*
- b) *Escherichia coli*
- c) *Eichhornia crassipes*
- d) *Lemna paucicostata*

Answer: Option (b)

96. The slow rate of decomposition of fallen logs in nature is due to their:

- a) Poor nitrogen content
- b) Low moisture content
- c) Low cellulose content
- d) Anaerobic environment around them

Answer: Option (a)

97. Which one of the following is not a bioindicator of water pollution?

- a) Blood-worms
- b) Sludge-worms
- c) Sewage fungus
- d) Stone flies

Answer: Option (d)

98. Which of the following hormone is chemically glycoprotein?

- a) Growth hormone

- b) Prolactin
- c) Erythropoietin
- d) Estrogen

Answer: Option (c)

99. The hormone responsible for “Fight and Flight” response is

- a) Adrenalin
- b) Thyroxine
- c) ADH
- d) Oxytocin

Answer: Option (a)

100. Which of the hormone(s) has effects on the stomach, pancreas, and gallbladder?

- a) Secretin
- b) Cholecystokinin
- c) Gastrin
- d) All of the above

Answer: Option (b)